Rica Esquivel

Virginia Beach, VA • ricaannesquivel@vt.edu • (757) 818-3774 • LinkedIn

SKILLS

Languages: Python, SQL, R, Java, C, HTML, x86 Assembly
Packages: Scikit-Learn, XGBoost, Pandas, Numpy, NLTK, Gensim, Doc2Vec
Methods: NLP, Machine Learning
Data & Cloud Platforms: Snowflake, AWS (EC2 and S3), MySQL
Data Visualization: Seaborn, Matplotlib, Plotly, Dash
Business: PowerBI, Microsoft Excel, Asana
Tools: Git, **Jupyter Notebooks**
Mathematics & Statistics: Calculus (I, II, & III), Linear Algebra, Applied Combinatorics, Discrete Mathematics

WORK EXPERIENCE

Omni-Channel Ops Intern – Tractor Supply Company, Brentwood TN   May – August 2025
- Designed and deployed a XGBoost ML system in Snowflake (Snowpark, Snowflake ML API, Python, SQL) to predict and reduce store cancellation risk and improve fulfillment reliability across 2,300+ stores and 30K+ SKUS.
- Automated data ingestion, inference, and batch uploads within Snowflake for secure, scalable, and cloud-native deployment, minimizing data egress.
- Achieved an estimated **$1.5M-$3M annual revenue recapture** and developed a Power BI dashboard to monitor model performance and business impact.

Data Science Intern – HII Mission Technologies, Virginia Beach VA   June 2024 – August 2024
- Developed a Random Forest model to predict maintenance durations, reducing equipment downtime and delays, a Doc2Vec-based recommendation system for maintenance personnel.
- Designed and deployed an interactive dashboard with 3D digital twin modeling to visualize sustainment health metrics and asset readiness.
- Demonstrated the operational value of predictive analytics and NLP to enhance mission readiness and streamline sustainment processes.

PROJECTS

Navy CVN Maintenance Dashboard – Data visualization dashboard built using the Dash framework that employs digital twin concepts, visualizing US Navy CVN, powered by predictive analytics (ML), enabling data-driven decisions to optimize sustainment of Navy systems.
Mealprep App – Full-stack web application built in a team of 5 using MySQL database, ran using AWS EC2, where users can browse meal recipes, customize weekly eating habits, and share customized meals to other users using QR codes.

CERTIFICATIONS

NVIDIA Introduction to Transformer-Based Natural Language Processing   2025
IBM Data Science Professional Certificate   2025

EDUCATION

Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg VA   Graduation: December 2025
Bachelor of Science: Computer Science

AWARDS

Dean's List – Virginia Tech (2 semesters)   Several
AFCEA Julie Walter Memorial Scholarship – AFCEA Educational Foundation   August 2024

LANGUAGES

English (Proficient)
Tagalog (Proficient)